



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,671	01/14/2002	Hendrik Johannis Boot	2183-5238US	9315
24247	7590	08/18/2006	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			PENG, BO	
			ART UNIT	PAPER NUMBER
			1648	

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/046,671	<b>Applicant(s)</b> BOOT ET AL.	
	<b>Examiner</b> Bo Peng	<b>Art Unit</b> 1648	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10, 12-18, 21, 22 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10, 12, 13-18, 21, 22 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This Office Action is in response to the amendment filed on May 30, 2006. Claims 1-9, 11, 19, 20 and 23-30 are cancelled. Claims 10, 14, 17, 18, 21 and 22 are amended. New claim 31 is added. Accordingly, claims 10, 12, 13-18, 21, 22 and 31 are pending and are under consideration in this Office action.
2. The rejection of claims 10, 14, 17 and 18 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is **withdrawn** in view of the amendment to the claims.
3. The rejection of claims 10, 12, 13-18, 21 and 22 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement is **withdrawn** in view of the amendment.
4. The rejection of claims 21-27 and 38-40 under 35 U.S.C. 103(a), as being unpatentable over Vakharia (5,871,744), Mundt (1999) and Muller (1982), is **maintained**, and now extended to new claim 31.
5. Applicant argues that none of the cited references discloses or even hints at the combined method of transfection of vvIBDV-non-permissive cells with wIBDV genome and subsequent transfer of progeny virus to vvIBDV-permissive cells for propagation. Therefore, a skilled person with knowledge of the prior art would not and could not achieve the presently claimed method.
6. Applicant's argument is considered, but found not persuasive. In response to applicant's

Art Unit: 1648

argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). According to M.P.E.P. § 2143.02, "Obviousness does not require absolute predictability, however, at least some degree of predictability is required. Evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness. *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976)." .

7. As indicated in the previous Office Action, specifically, Vakharia et al teaches that transfection of VERO, CEF or CEK cells with both segments A and B of IBDV RNA can result in the formation of infectious rIBDV progeny.

8. Muller teaches that primary lymphoid cells from the bursa of Fabricicius, which are the nature host cell of IBDV serotype I strains, are more fit for IBDVs to grow in a cell culture *in vitro*. Muller observed that virus-specific protein altered while the virus was propagating in CEF cells, resulting in incomplete viral particles. Muller shows that IBDV maintains its native viral particles while it was cultured in primary bursa cells.

9. The above references placed the knowledge of generating rIBDVs in vitro by transfecting VERO, CEF or CEK cells by IBDV RNA in the possession of artisan. The suggestion that growing IBDVs in their permissive cells or nature host cells can reduce unwanted incomplete viral particles, and be more fit for the virus to grow *in vitro* would motivate one skilled in the art to culture newly generated rIBDV progeny in primary permissive cells. One skilled in the art

Art Unit: 1648

would have been motivated to generate the claimed invention with a reasonable expectation of success. Therefore, the invention as a whole was obvious over Vakharia, Mundt and Muller. Applicant has not presented any evidence showing that there was no reasonable expectation of success.

10. Therefore, the Applicant has not provided any compelling reasoning or evidence to overcome the obviousness rejection under 35 U.S.C. §103.

***Remarks***

11. No claims are allowed. Accordingly, **THIS ACTION IS MADE FINAL.**

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR


Art Unit: 1648

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bo Peng, Ph.D. whose telephone number is 571-272-5542. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell, Ph. D. can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Bo Peng, Ph.D.  
August 14, 2006

  
**MARY E. MOSHER, PH.D.**  
**PRIMARY EXAMINER**